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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,009	02/05/2004	Andrew Harvey Barr	200208802-1	5356
22879	7590	11/07/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			TA, THO DAC	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/773,009	BARR, ANDREW HARVEY	
	Examiner	Art Unit	
	Tho D. Ta	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/24/05 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Roche et al. (4,751,435).

In regard to claim 1, Roche et al. discloses a connector comprising: a first contact 34 that contacts a conductor of a first circuit; a second contact 37 that contacts a conductor of a second circuit; and a capacitor 50 coupled between the first and second contacts 34, 37, the capacitor 50 being serially coupled only to the first and second contacts 34, 37 whereby, the connector capacitively couples the conductor of the first circuit to the conductor of the second circuit (see fig. 2).

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4. Claims 1-4, 6, 11-13-15, 17, 22, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Thrush et al. (5,403,195).

In regard to claim 1, Thrush et al. discloses a connector comprising: a first contact 20 that contacts a conductor of a first circuit; a second contact 20 that contacts a conductor of a second circuit; and a capacitor 30 coupled between the first and second contacts 20, the capacitor 30 being serially coupled only to the first and second contacts 20 whereby, the connector capacitively couples the conductor of the first circuit to the conductor of the second circuit.

In regard to claim 2, Thrush et al. discloses that an electrically insulative body 10 encapsulating the capacitor 30 and carrying the first and second contacts 20.

In regard to claim 3, Thrush et al. discloses that the second contact 20 is a male contact 26.

In regard to claim 4, Thrush et al. discloses that the first contact 20 is a female contact 24.

In regard to claim 6, Thrush et al. discloses the first and second contacts 20 are disposed substantially transverse to each other.

In regard to claim 11, Thrush et al. discloses the first circuit is an integrated circuit (this socket is a DIP socket and 24 is connected to an IC).

In regard to claim 12, Thrush et al. discloses the second circuit is a PCB (26 is connected to PCB)

In regard to claim 13, Thrush et al. discloses a connector comprising: an insulative body 10; a first contact 20 carried by the body 10 that contacts a conductor of a first circuit (an IC); a second contact 20 carried by the body 10 that contacts a conductor of a second circuit (PCB); and a capacitor 30 encapsulated within the body 10 and coupled between the first and second contacts 20, the capacitor 30 being serially coupled only to the first and second contacts 20 whereby, the connector capacitively couples the conductor of the first circuit to the conductor of the second circuit.

In regard to claim 14, Thrush et al. discloses that the second contact 20 is a male contact 26.

In regard to claim 15, Thrush et al. discloses that the first contact 20 is a female contact 24.

In regard to claim 17, Thrush et al. discloses the first and second contacts 20 are disposed substantially transverse to each other.

In regard to claim 22, Thrush et al. discloses the first circuit is an integrated circuit (this socket is a DIP socket and 24 is connected to an IC).

In regard to claim 23, Thrush et al. discloses the second circuit is a PCB (26 is connected to PCB).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-14, 16-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. (5,145,413) in view of Roche et al.

In regard to claim 1, Okamoto et al. discloses a connector comprising: a first contact 30 that contacts a conductor of a first circuit (mating connector); a second contact 31 that contacts a conductor of a second circuit (PCB); and a capacitor 35 coupled between the first and second contacts 30, 31, the capacitor 50 being serially coupled to the first and second contacts 30, 31 whereby, the connector capacitively couples the conductor of the first circuit to the conductor of the second circuit.

However, Okamoto et al. discloses that the capacitor 50 being serially coupled to the first and second contacts 30, 31 and the common earth terminal 32 instead of serially coupled to only the first and second contacts 30, 31.

Roche et al. discloses that the capacitor 50 being serially coupled only to the first and second contacts 34, 37.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okamoto et al. invention by eliminating the common earth terminal 32 when its function is not needed in order to simplify the manufacturing process.

In regard to claim 2, Okamoto et al. discloses that an electrically insulative body 41 encapsulating the capacitor 35 and carrying the first and second contacts 30, 31.

In regard to claim 3, Okamoto et al. discloses that the second contact 31 is a male contact.

In regard to claim 5, Okamoto et al. discloses the first and second contacts 30, 31 are disposed along a substantially common line.

In regard to claim 6, Okamoto et al. does not disclose that the first and second contacts 30, 31 are disposed substantially transverse to each other.

It would have been obvious to further modify Okamoto et al. invention by having the first and second contacts 30, 31 are disposed substantially transverse to each other, since applicant has not disclosed that having the first and second contacts extends at

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this specific direction solves any stated problem or is for any particular purpose and it appears that the connecting device would perform equally well with any directions.

In regard to claim 7, Okamoto et al. discloses that a plurality of first contacts 30, a like plurality of second contacts 31, and a like plurality of capacitors 35, each capacitor 35 coupled between a different respective pair of the first and second contacts 30, 31.

In regard to claim 8, Okamoto et al. discloses that the plurality of first contacts 30 and the plurality of second contacts 31 lie in a substantially common plane.

In regard to claim 9, Okamoto et al. discloses that the plural contact sets of the plurality of first and second contacts 30, 31 lying in a substantially common plane.

In regard to claim 10, Okamoto et al. discloses that the plural contact sets are disposed substantially parallel to each other (see fig. 14).

In regard to claim 11, the recitation "an integrated circuit", it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

In regard to claim 12, Okamoto et al. discloses the second circuit is a PCB.

In regard to claim 13, Okamoto et al. discloses a connector comprising: an insulative body 41; a first contact 30 carried by the body 41 that contacts a conductor of a first circuit (a mating connector); a second contact 31 carried by the body 41 that contacts a conductor of a second circuit (PCB); and a capacitor 35 encapsulated within the body 41 and coupled between the first and second contacts 30, 31, the capacitor 35 being serially coupled to the first and second contacts 30, 31 whereby, the connector capacitively couples the conductor of the first circuit to the conductor of the second circuit.

However, Okamoto et al. discloses that the capacitor 50 being serially coupled to the first and second contacts 30, 31 and the common earth terminal 32 instead of serially coupled to only the first and second contacts 30, 31.

Roche et al. discloses that the capacitor 50 being serially coupled only to the first and second contacts 34, 37.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okamoto et al. invention by eliminating the common earth terminal 32 when its function is not needed in order to simplify the manufacturing process.

In regard to claim 14, Okamoto et al. discloses that the second contact 31 is a male contact.

In regard to claim 16, Okamoto et al. discloses the first and second contacts 30, 31 are disposed along a substantially common line.

In regard to claim 17, Okamoto et al. does not disclose that the first and second contacts 30, 31 are disposed substantially transverse to each other.

It would have been obvious to further modify Okamoto et al. invention by having the first and second contacts 30, 31 are disposed substantially transverse to each other, since applicant has not disclosed that having the first and second contacts extends at this specific direction solves any stated problem or is for any particular purpose and it appears that the connecting device would perform equally well with any directions.

In regard to claim 18, Okamoto et al. discloses that a plurality of first contacts 30, a like plurality of second contacts 31, and a like plurality of capacitors 35, each capacitor 35 coupled between a different respective pair of the first and second contacts 30, 31.

In regard to claim 19, Okamoto et al. discloses that the plurality of first contacts 30 and the plurality of second contacts 31 lie in a substantially common plane.

In regard to claim 20, Okamoto et al. discloses that the plural contact sets of the plurality of first and second contacts 30, 31 lying in a substantially common plane.

In regard to claim 21, Okamoto et al. discloses that the plural contact sets are disposed substantially parallel to each other.

In regard to claim 22, the recitation "an integrated circuit", it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

In regard to claim 23, Okamoto et al. discloses the second circuit is a PCB.

In regard to claim 24, Okamoto et al. discloses a connector comprising: a plurality of first contact 30, each first contact 30 contacting a respective one of a like plurality of conductors of a first circuit (mating connector); a second like plurality of contacts 31, each second contact 31 contacting a respective one of a like plurality of conductors of a second circuit (PCB); and a like plurality of capacitors 35 coupled between respective pairs of the first and second contacts 30, 31, each capacitor 35 being serially coupled to a respective pair of the first and second contacts 30, 31 whereby, the connector capacitively couples each conductor of the first circuit to a corresponding respective conductor of the second circuit.

However, Okamoto et al. discloses that the capacitor 50 being serially coupled to the first and second contacts 30, 31 and the common earth terminal 32 instead of serially coupled to only the first and second contacts 30, 31.

Roche et al. discloses that the capacitor 50 being serially coupled only to the first and second contacts 34, 37.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okamoto et al. invention by eliminating the common earth terminal 32 when its function is not needed in order to simplify the manufacturing process.

In regard to claim 25, Okamoto et al. discloses that an electrically insulative body 41 encapsulating the capacitor 35 and carrying the first and second contacts 30, 31.

In regard to claim 26, Okamoto et al. discloses the first and second contacts 30, 31 are disposed along a substantially common line.

In regard to claim 27, Okamoto et al. does not disclose that the first and second contacts 30, 31 are disposed substantially transverse to each other.

It would have been obvious to further modify Okamoto et al. invention by having the first and second contacts 30, 31 are disposed substantially transverse to each other, since applicant has not disclosed that having the first and second contacts extends at

this specific direction solves any stated problem or is for any particular purpose and it appears that the connecting device would perform equally well with any directions.

In regard to claim 28, Okamoto et al. discloses that the plurality of first contacts 30 and the plurality of second contacts 31 are divided into contact sets lie in a substantially common plane.

In regard to claim 29, Okamoto et al. discloses that the plural contact sets are disposed substantially parallel to each other.

7. Claims 4, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. and Roche et al. as applied to claims 1, 13 above, and further in view of Dolin, Jr. (5,192,231).

In regard to claims 4, 15, Okamoto et al. as modified by Roche et al has been discussed above.

Okamoto et al. does not disclose that the first contact 30 is a female contact.

Dolin, Jr. discloses a coupler with one end having male contacts 28, 30, 32 and the opposite end having female contacts 18, 20, 22.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Okamoto et al. invention by constructing the connector with one end having male contacts and the opposite end having female contacts as disclosed by Dolin, Jr. in order to provide a versatile connector/adaptor.

Response to Arguments


8. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


THO D. TA
PRIMARY EXAMINER

tdt
11/02/05